

## ABSTRACT

In the adaptive connection admission control method of the present invention, a corresponding ingress edge node performs connection admission control for a new connection within the amount of bandwidth initially allocated to each of paths between the ingress and egress edge nodes. The amount of remaining bandwidth allocated to a specific path  $P_r$  is compared with an amount of bandwidth required for a call requesting new connection setup input to the corresponding ingress edge node. The amount of additional bandwidth to be requested from the bandwidth broker is predicted when the amount of the remaining bandwidth does not satisfy the amount of bandwidth required for the connection setup requesting call. The ingress edge node requests additional bandwidth from the bandwidth broker on the basis of the predicted amount of the additional bandwidth, changing bandwidth information of the corresponding path  $P_r$ , and performing connection admission control.